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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,445	01/10/2002	Leland Bruce Traylor	0032/010321	8614

7590 02/10/2004  
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EXAMINER	
COLLINS, GIOVANNA M	
ART UNIT	PAPER NUMBER
3672	

DATE MAILED: 02/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

SW

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/044,445	TRAYLOR, LELAND BRUCE	
	<b>Examiner</b>	<b>Art Unit</b>	
	Giovanna M. Collins	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,8,11,12,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8,11,12,14 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3,4, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight ('476) in view of Jensen ('389), Suman, Jr. ('929) and Applicant's Disclosure.

Knight discloses (see Figs. 11 and 13-15) a single continuous structure engaged to a pump and to all associated loads comprising mechanical suspension means (318') acting as a primary load bearing element, said mechanical suspension means being formed into a long cylinder or rope and being spooled into a reel allowing said mechanical suspension means to be played off the reel into a well in a continuous fashion; a flexible tubular conduit (314') capable of conveying fluids from a pump to the earth's surface having sufficient strength to withstand the pressure of the pumped fluid; an cable (316') said cable having insulation means; a jacket (302') attached to the single continuous structure tightly enough so that the mechanical loads are fully transferred to the mechanical suspension means as the single structure is installed into the well. Knight does disclose the cable is a communication cable but does not disclose what it communicates. Jensen et al. teaches that it known in the art to have an electrical submersible pump suspended by a cable in a well (see col. 3, lines 30-43). Suman teaches it is known in the art that electric cable are a type of communication cable in that they communicate electrical

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power to a downhole pump (see col. 2, lines 3-7). Knight also does not disclose a means to attach the jacket to the single continuous structure. However, in the amended Specification page 4, lines 15-17. Applicant states that banding machines are well known in the art and commonly used to automatically band electrical cable to production tubing in conventional submersible pump installations. The Jensen and Suman reference and the Applicant's disclosure would indicate that one of ordinary skill in the art would be familiar with using a suspension means to lower an electric pump in a well, using communications cable to communicate electric power to a pump and using banding machines to automatically band electrical cable to production tubing in conventional submersible pump installations. Therefore it would be obvious to modify Knight to have the pump be an electrically submersible pump, to have the cable communicate electric power to the pump and a banding machine to automatically band electrical cable to production tubing in conventional submersible pump installations as taught by Jensen, Suman, and the Applicant's disclosure.

Referring to claim 3, Knight discloses wherein the flexible tubular conduit (314') and the electrical cable (315') are attached to the mechanical suspension means (318') at periodic intervals.

Referring to claim 4, wherein the mechanical means is made out of a flexible metallic material (see col. 2, lines 45-46).

Referring to claim 8, Knight discloses wherein the flexible tubular conduit is made out of plastic (see col. 2, lines 35-40).

Referring to claim 11, Knight discloses wherein the electrical cable (318') is unarmored.

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2. Claims 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight ('476) in view of Jensen ('389) and Suman, Jr. ('929).

Knight discloses (see Figs. 13-15) a method to install a pump into a well comprising engaging the mechanical suspension means (318), flexible tubular conduit (314) and the cable (316) to the pump; suspending the pump over the well by the mechanical suspension means; attaching the flexible tubular conduit and the electrical cable to the mechanical suspension means starting immediately above the pump using a jacket (302) or jackets attached to this single continuous structure tightly enough so that the mechanical loads are fully transferred to the mechanical suspension means as the single structure is installed into the well; and lowering the pump (see Fig. 15) into the well by playing out the mechanical suspension means, the tubular conduit and the electrical cable at the same rate each from a separate reel; and locking the pump and all associated loads at the appropriate depth level in the well. Knight does not disclose the pump is an electrical submersible pump. Knight does disclose the cable is a communication cable but does not disclose what it communicates. Jensen et al. teaches that it known in the art to have an electrical submersible pump suspended by a cable in a well (see col. 3, lines 30-43). Suman teaches it is known in the art that electric cable are a type of communication cable in that they communicate electrical power to a downhole pump (see col. 2, lines 3-7). The Jensen and Suman reference would indicate that one of ordinary skill in the art would familiar with using a suspension means to lower an electric pump in a well and that communications cable can communicate electric power to a pump. Therefore it would be obvious to modify Knight to have the pump be an electrically submersible pump to have the cable communicate electric power to the pump as taught by Jensen and Suman, Jr.

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Referring to claim 14, Knight discloses (see Fig. 14) wherein a plurality of jackets (302) are attached periodically to the single continuous structure, said jackets comprising clamping means wrapped around the single structure at multiple points.

Referring to claim 15, Knight discloses whereon the clamping means (302) are made out of plastic, metal or rubber (see col. 3, lines 45-49).

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1,3,4, 8 ,11 ,12, 14 and 15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 703-306-5707. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

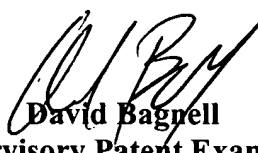
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

gmc

  
**David Bagrell**  
**Supervisory Patent Examiner**  
**Technology Center 3670**